Meeting of the Central Valley Flood Protection Board
July 23, 2010

Staff Report – Encroachment Permit

City of Stockton
Sperry Road Extension Project, San Joaquin County

1.0 – ITEM

Consider approval of draft Permit No. 18593 (Attachment B).

2.0 – APPLICANT

City of Stockton.

3.0 – LOCATION

The project is located in Stockton along I-5.
(French Camp Slough, San Joaquin County, see Attachment C)

4.0 – DESCRIPTION

Applicant proposes to construct a single-span, cast-in-place, post-tensioned box girder bridge that clear spans French Camp Slough; the bridge will be supported by short seat-type abutments on driven, precast, pre-stressed concrete piles.

5.0 – PROJECT ANALYSIS

The applicant is proposing to construct a new bridge which is a single-span, cast-in-place, post-tensioned box girder that will clear span the top of new embankments on top of the top bank of the slough with a structure length of 154 feet and a structure width of 135 feet. The new bridge will be supported by short seat-type abutments on driven, precast, pre-stressed concrete piles at each approach embankment. New embankments will be constructed on the top banks of the slough to match up with the proposed bridge elevations. Rock slope protection will be placed around each

abutment and on the new embankment slopes. The box girder superstructure will be constructed with the use of temporary trestles.

The proposed project is located within French Camp Slough, a regulated stream and it is a non-federal project.

5.1 – Hydraulic Analysis

The new bridge will clear span the top of new embankments on top of the top bank of the slough. No structures, such as piers will be installed within the floodway or channel to impede the flow. A hydraulic analysis was performed by Domenichelli & Associates (D&A), Inc. for the proposed project on March 25, 2010. Based on the hydraulic model analysis results for the existing conditions under a 100-year flood event, the water surface elevation at the site is 13.11 feet, NGVD 29 (see Attachment E). This elevation is similar to the 100-year water surface elevation for the site, as indicated in the Flood Insurance Study by Federal Emergency Management Agency (FEMA). The hydraulic analysis results also showed that the 100-year water surface elevation under the proposed project conditions, excluding re-vegetation is 13.11 feet, NGVD 29 (see Attachment F). This shows that the proposed project will not cause an increase in the 100-year water surface elevation. The new bridge will provide a freeboard of approximately 6 feet 2 inches above the 100-year floodplain elevation of 13.11 feet, NGVD 29, and a freeboard of approximately 4 feet 6 inches above the 200-year floodplain elevation of 14.82 feet, NGVD 29. The 200-year floodplain elevation was estimated by interpolating between the 100- and 500-year floodplain elevations; the 500-year floodplain elevation was obtained from the FEMA's Flood Insurance Study. The new bridge will provide a minimum of three (3) feet freeboard for 100- and 200-year flood events, and this complies with the California Code of Regulations, Title 23 Waters, Section 128(a)(10)(A).

A scour analysis also was performed by D&A for the proposed project. The scour analysis results show that there is a potential scour of 3 to 4 feet at the abutments. D&A recommends rock protection be placed around each abutment to reduce the scour potential, and the rock protection is included in the proposed project.

The applicant plans to re-vegetate the project area following project construction. However, the current hydraulic analysis provided by the applicant does not include the full-growth vegetation from the re-vegetation plan, and the impacts of the re-vegetation to the channel are unknown. Therefore, Board staff recommends denial of the proposed re-vegetation plan under this permit. The applicant must submit a permit application for the re-vegetation plan that includes a detailed planting plan and a corresponding hydraulic analysis taking into account considering a fully mature growth

development of the re-vegetation plan (see Special Condition TWENTY-FOUR of draft Permit No. 18593 (Attachment B).

5.2 – Geotechnical Analysis

Based on the 90% submittal general plan dated April 9, 2010, abutments will be constructed within the new embankments on top of the top banks of the slough; the abutments will be buried under the new embankments protected with revetments. The abutments will be supported by driven, precast, pre-stressed concrete piles. A preliminary foundation report was prepared by Kleinfelder for the proposed project dated November 3, 2009. In the report, estimated pile tip elevation of -46 feet, NGVD 29 was recommended for the proposed project. The design pile tip elevation, as indicated in the 90% submittal foundation plan dated April 6, 2010 is -50 feet, NGVD and it is 5 feet deeper than that recommended by Kleinfelder.

5.3 – Additional Staff Analysis

The current plans submitted by the applicant are 90% submittal. The applicant is required to submit final construction plans before a Board permit can be issued, provided that there are no substantial changes between the 90% submittal and the final construction plans.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The U.S. Army Corps of Engineers (USACE) 208.10 comment letter dated May 21, 2010 has been received and is attached to draft Permit 18593 (Attachment B) as Exhibit A. USACE has no objection to the project and commented that the project does not affect the ability of the channel to pass 2,000 cubic feet per second (cfs). The discharge of 3,970 cfs was used in the hydraulic model analysis performed by D&A. The value exceeds 2,000 cfs and the requirement is met.
- The San Joaquin County Flood Control & Water Conservation District (District) endorsement letter dated February 22, 2010 has been received and is attached to draft Permit 18593 (Attachment B) as Exhibit B. The District has no objection and endorses the project with conditions stated in the letter.

7.0 – PROPOSED CEQA FINDINGS

Board staff has prepared CEQA findings (see Attachment D) for this project. Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent.

8.0 – SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

   The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

   The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

   This project has no negative impacts to the State Plan of Flood Control because no structures will be installed within the floodway and the project will not cause increase in the 100-year water surface elevation as compared to that under the existing conditions.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

   The high tide effects were taken into account when the hydraulic model was performed, and the project will still have a freeboard of more than 3 feet. The water surface elevation change resulted from climate change for the site is unknown. However, because of the excessive amount of freeboard in the channel at this location, the water surface elevation raise resulted from climate change will be within the freeboard. There are no other foreseeable projected future events that would impact this project.

9.0 – STAFF RECOMMENDATION

Staff recommends that the Board adopt the CEQA findings, direct staff to file a Notice of Determination with the State Clearinghouse, and approve Permit No. 18593 with the exception of the re-vegetation plantings.

10.0 – LIST OF ATTACHMENTS

A. Resolution (Not applicable, not included)
B. Draft Permit
C. Location Maps and Photos
D. CEQA Findings
E. Summary of Hydraulic Analysis Results under Existing Conditions
F. Summary of Hydraulic Analysis Results under Project Conditions (Excluding Re-vegetation)

Report Completed by:	Joo Chai Wong
Design Review:	Joo Chai Wong
Environmental Review:	Andrea Mauro
Document Review:	Ali Porbaha and Len Marino

DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18593 BD

This Permit is issued to:

City of Stockton
22 E Weber Ave., 3rd Floor
Stockton, California 95202

To construct a single-span, cast-in-place, post-tensioned box girder bridge that clear spans French Camp Slough; the bridge will be supported by short seat-type abutments on driven, precast, pre-stressed concrete piles. The project is located in Stockton along I-5 (Section 26, T1N, R6E, MDB&M, San Joaquin County Flood Control and Water Conservation District, French Camp Slough, San Joaquin County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: _____

_____
Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18593 BD

THIRTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FOURTEEN: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources, San Joaquin County Flood Control and Water Conservation District or any other agency responsible for maintenance.

FIFTEEN: The permittee shall contact the Department of Water Resources by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

SIXTEEN: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board. A professional engineer registered in the State of California shall certify that all work was inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

SEVENTEEN: The Central Valley Flood Protection Board and Department of Water Resources shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

EIGHTEEN: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central

Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

NINETEEN: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

TWENTY: The permittee shall be responsible for repair of any damages to French Camp Slough including new embankments and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY-ONE: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend and hold harmless the State of California, or any departments thereof, from any liability or claims of liability associated therewith.

TWENTY-TWO: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

TWENTY-THREE: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-FOUR: There shall be no plantings within and near the project area under this permit, except that of native grasses that will be required for slope protection of the fill placement. The applicant must submit an application for a proposed revegetation plan to include a detailed planting plan and a corresponding hydraulic analysis.

TWENTY-FIVE: All cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to April 15.

TWENTY-SIX: Prior to construction the permittee shall install an X, Y, Z axis based coordinate monitoring system to monitor French Camp Slough before, during and after all pile driving activities.

TWENTY-SEVEN: Revetment shall be uniformly placed and properly transitioned into the bank, or adjacent revetment and in a manner which avoids segregation.

TWENTY-EIGHT: Revetment shall be quarry stone and shall meet the following grading:

Quarry Stone

Stone Size	Percent Passing
15 inches;	100
8 inches;	80-95
6 inches;	45-80
4 inches;	15-45
2 inches;	0-15

TWENTY-NINE: Quarry rock shall be used on slopes steeper than 3 horizontal to 1 vertical.

THIRTY: The revetment shall not contain any reinforcing steel, floatable, or objectionable material. Asphalt or other petroleum-based products may not be used as fill or erosion protection on the levee section or within the floodway.

THIRTY-ONE: The recommended minimum thickness of revetment, measured perpendicular to the bank or levee slope, is 18 inches below the usual water surface and 12 inches above the usual water surface.

THIRTY-TWO: Temporary staging, formwork, stockpiled material, equipment, gravel work pads, work testles, scaffolding, temporary buildings, and other appurtenances shall not remain in the floodway during the flood season from November 1 to April 15.

THIRTY-THREE: The temporary trestle piling shall be completely removed and voids grouted, or removed to at least 1 foot below the natural ground line and at least 3 feet below the bottom of the low-water channel.

THIRTY-FOUR: Trees, brush, sediment, and other debris shall be kept cleared from the project site and disposed of outside the floodway to maintain the design flow capacity and flowage area.

THIRTY-FIVE: All fencing, gates and signs removed during construction of this project shall be replaced in kind and at the original locations. If it is necessary to relocate any fence, gate or sign, the permittee is required to obtain written approval from the Central Valley Flood Protection Board prior to installation at a new location.

THIRTY-SIX: All temporary fencing, gates and signs shall be removed upon completion of the project.

THIRTY-SEVEN: Backfill material for excavations within the channel including river bank and channel bottom shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

THIRTY-EIGHT: Materials used for new embankment construction shall be placed in 4- to 6-inch thick layers and compacted to a relative compaction of at least ninety five (95) percent per ASTM D698-91 or ninety (90) percent per ASTM D1557-91, and at or above optimum moisture content.

THIRTY-NINE: Density tests by a certified materials laboratory will be required to verify compactions of backfill for the project.

FORTY: The stability of the channel including channel bottom, river bank, and new embankment shall be maintained at all times during construction.

FORTY-ONE: The soffit of the proposed bridge shall be a minimum of three (3) feet above the design floodplane elevation.

FORTY-TWO: The permittee shall be responsible for all damages due to settlement, consolidation, or

heave from any construction-induced activities.

FORTY-THREE: All debris generated by this project shall be disposed of outside the floodway and project site.

FORTY-FOUR: Debris that may accumulate on the permitted encroachment(s) shall be cleared off and disposed of outside the floodway and French Camp Slough after each period of high water.

FORTY-FIVE: The project site shall be restored to the condition that existed prior to start of work.

FORTY-SIX: If the permitted result(s) in an adverse hydraulic impact, the permittee shall provide appropriate mitigation measures, to be approved by the Central Valley Flood Protection Board, prior to implementation of mitigation measures.

FORTY-SEVEN: Upon completion of the project, the permittee shall submit as-built drawings to: Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite LL30, Sacramento, California 95821.

FORTY-EIGHT: The letter from the Department of the Army dated May 21, 2010, which is attached to this permit as Exhibit A is in reference to this project.

FORTY-NINE: The permittee shall comply with the conditions set forth in the letter from the San Joaquin County Flood Control and Water Conservation District dated February 22, 2010, which is attached to this permit as Exhibit B and is incorporated by reference.

DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

REPLY TO
ATTENTION OF

Flood Protection and Navigation Section (18593)

JUN 09 2010

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

Dear Mr. Punia:

We have reviewed a permit application by the City of Stockton, Department of Public Works (application number 18593). This project includes constructing a single span, cast in place, post-tensioned box girder bridge over French Camp Slough. The proposed bridge is 154-foot long and 135-foot wide, supported by seat-type abutments on driven, precast, pre-stressed piles within the channel of French Camp Slough. The proposed work is located in Stockton along Interstate 5 at 37.8951°N 121.2783°W NAD83, San Joaquin County, California.

The proposed work does not affect a Federally constructed project, however, there are Federal projects just upstream and downstream from the proposed work. According to the Littlejohn Creek Channels Operation and Maintenance manual and the Lower San Joaquin River and Tributaries Project, California, Unit No. 1 Operation and Maintenance manual, the channel is designed for 2,000 cubic feet per second (cfs) upstream and downstream from the proposed work. The sponsor shall ensure that the proposed work does not affect the ability of the channel to pass 2,000 cfs.

A Section 10 and/or Section 404 permit application (SPK-2003-799) is in process for this work.

A copy of this letter is being furnished to the acting chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821.

Sincerely,

Meegan G. Nagy, P.E.
Chief, Flood Protection and Navigation Section

SAN JOAQUIN COUNTY
FLOOD CONTROL & WATER CONSERVATION DISTRICT
P. O. BOX 1810
1810 EAST HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
TELEPHONE (209) 468-3000
FAX NO. (209) 468-2999

THOMAS R. FLINN
DIRECTOR OF PUBLIC WORKS
FLOOD CONTROL ENGINEER

February 22, 2010

Central Valley Flood Protection Board
3310 El Camino Avenue
Sacramento, California 95821

Attention: Mr. Jon Yego, Chief
Floodway Protection Section

SUBJECT: CENTRAL VALLEY FLOOD PROTECTION BOARD PERMIT APPLICATION OF THE CITY OF STOCKTON, AT FRENCH CAMP SLOUGH, EAST OF INTERSTATE 5

Gentlemen:

Reference is made to the Central Valley Flood Protection Board Permit Application of the City of Stockton, to construct a bridge over French Camp Slough. The bridge is part of the Sperry Road Extension project and will consist of a single-span, cast-in-place, post-tensioned box girder that will clear the banks of the slough. The bridge will be 154 feet long and 134 feet, five inches wide, and have the capacity to accommodate eight traffic lanes and a 12-foot pedestrian/bike path. Supporting the structure will be short, seat-type abutments on driven, precast, pre-stressed piles. A temporary trestle system and false work, supported by driven steel piles in the slough and on its banks, is required to construct the bridge. Approximately 85 piles will be required for the temporary trestle.

The project is located east of Interstate 5 and west of El Dorado Street at the projected southwest extension of Sperry Road, in San Joaquin County, in Sections 12 and 13, C.M. Weber Grant, Mount Diablo Base and Meridian.

The San Joaquin County Flood Control and Water Conservation District (District) has reviewed the Central Valley Flood Protection Board Permit application of the City of Stockton and endorses the project subject to the following conditions:

1. The District shall not be responsible for maintenance of the facilities specified in this Permit.

2. The District shall not be liable for any damage or repairs needed to the facilities due to the District's operation and maintenance of French Camp Slough.

3. The Permittee shall be responsible for the modification or possible removal of the facilities, as requested by the District, if required for any future flood control plans at the applicant's sole cost and expense.

4. The Permittee shall be liable for any damage to French Camp Slough that may occur as a result of this project.

5. The project shall be constructed in accordance with the preliminary plans dated November 3, 2009, submitted with the application dated January 28, 2010. Any revisions to the project will require submittal of the revised plans to the District for review and approval.

6. No work shall be allowed in the French Camp Slough channel between November 1st and April 15th without prior approval of the District.

7. The Permittee shall properly maintain the encroachments in accordance with applicable current or future local, State, and Federal standards.

8. Upon completion of the project, the Permittee shall submit as-built drawings in PDF format on a CD disk to:

San Joaquin County Flood Control and Water Conservation District
1810 East Hazelton Avenue
Stockton, California 95205

If there are any questions regarding these comments, please contact me at (209) 953-7617.

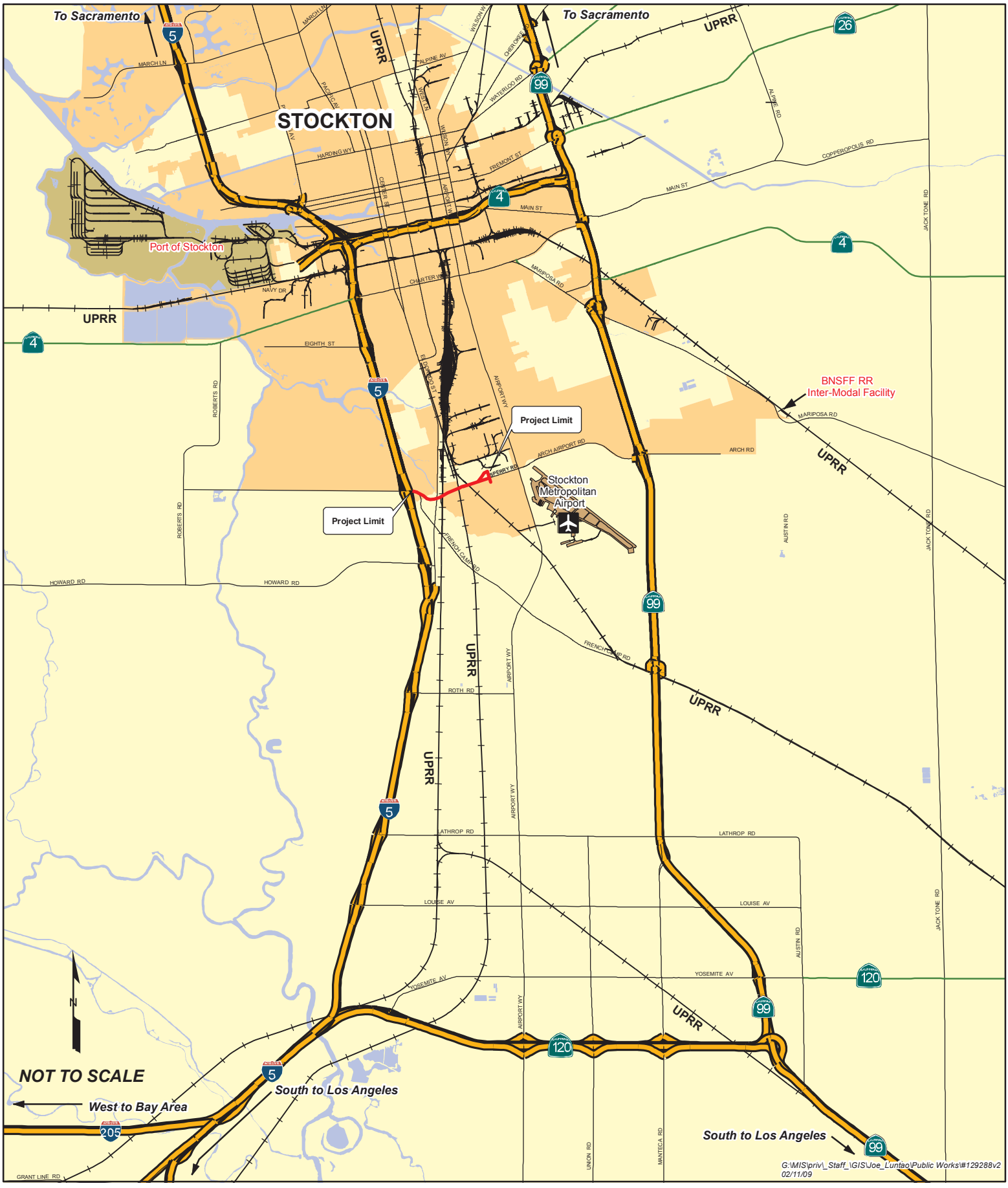
Sincerely,

MARK W. CONNELLY
Engineering Services Manager

MWC:JC:to
FM-10B042-T1

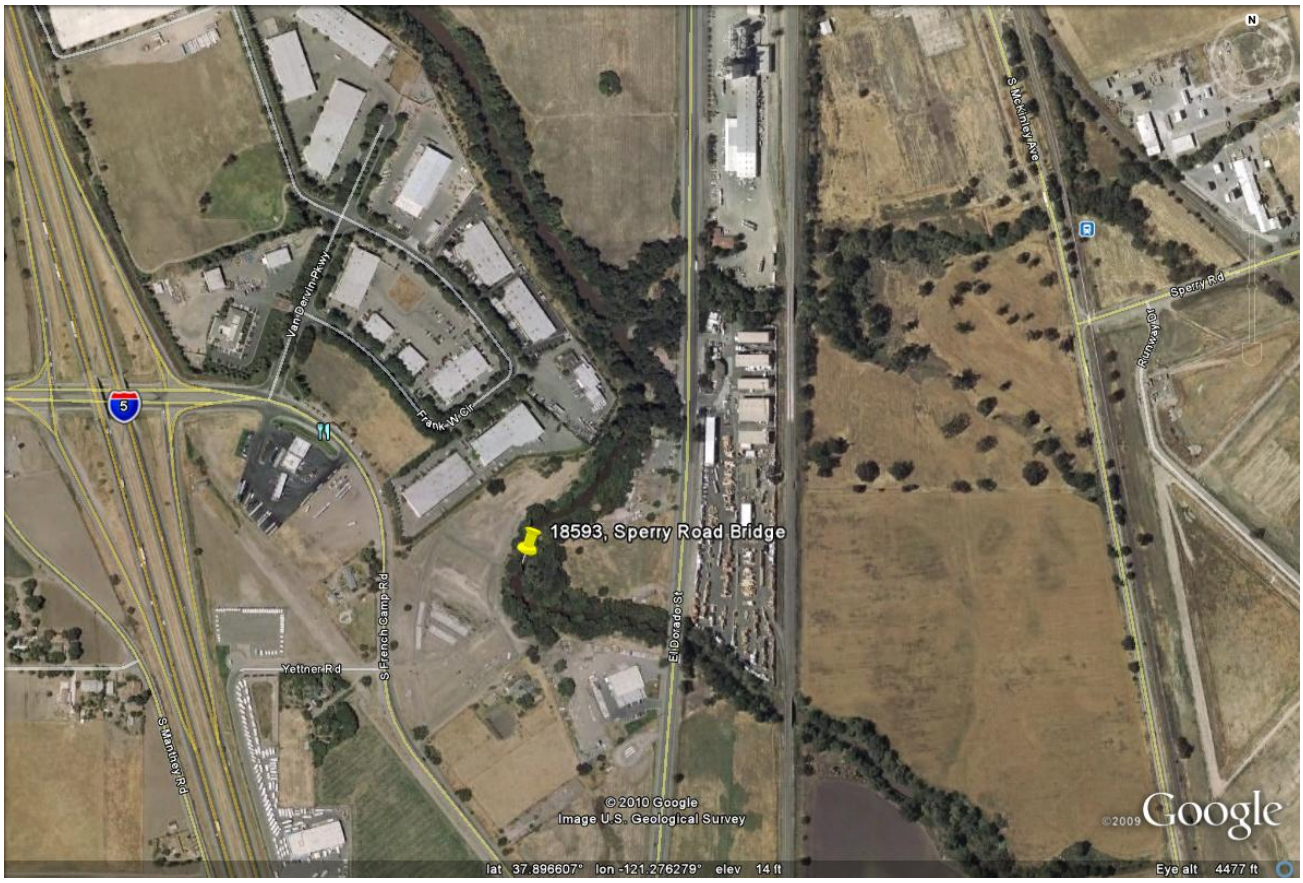
VICINITY MAP

Attachment C



SPERRY ROAD EXTENSION

Project Location Map



Source: Google Earth

Sperry Road Extension Project Photos

Project Photo #1: French Camp Slough near proposed Sperry Road French Camp Slough Bridge Crossing

Project Photo #3: French Camp Slough near proposed Sperry Road French Camp Slough Bridge Crossing

Project Photo #2: French Camp Slough near proposed Sperry Road French Camp Slough Bridge Crossing

Attachment C

7.0 – PROPOSED CEQA FINDINGS

Board staff has prepared the following CEQA Findings:

The Board, acting as a responsible agency under CEQA, has independently reviewed the Draft Environmental Impact Report/Environmental Assessment (DEIR, March 2006), Final Environmental Impact Report/Environmental Assessment (FEIR, November 2006), and Stockton City Council Resolution 07/02-62 (adopted June 26, 2007), (which includes a Statement of Facts, Findings, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program) for the Interstate 5/French Camp Road Interchange and Sperry Road Extension Project (SCH No. 2003112018) prepared by the lead agency, the City of Stockton. These documents, including project design and City resolution, may be viewed or downloaded from the Central Valley Flood Protection Board website at http://www.cvfpb.ca.gov/meetings/2010/7-22-23-2010agenda.cfm under a link for this agenda item.

7.1 – Impacts that can be Mitigated

The following are the significant impacts and the mitigation measures to reduce them to less than significant:

- Aesthetics and Visual Resources: The project proponent will prepare and implement a restoration plan in accordance with County and City tree ordinance requirements to mitigation for the permanent visual impact of vegetation removal.

- Biological Resources: Prior to construction, conduct a biological resources education program for construction crews and enforce construction restrictions. The project proponent will prepare and implement a restoration plan in accordance with County and City tree ordinance requirements to mitigation for the loss of Great Valley Oak Riparian Forest habitat. The contractor would minimize the spread of noxious weeds by educating construction staff on identification and removal, using weed-free materials, and washing equipment. Pre-construction surveys will be completed for Swainson's hawk, western pond turtle, giant garter snake, riparian brush rabbit, riparian woodrat, bank swallow, and western burrowing owl.

- Community Resources: The project proponent will implement traffic control measures to reduce disruption of traffic pattern during construction activities.

- Hydrology and Water Quality: Implement construction-related and permanent post-construction Best Management Practices, including erosion control. A Storm Water Pollution Prevention Plan (SWPPP) will be implemented, as appropriate, to retain, treat, and dispose of surface water and groundwater. Additionally, the project proponent will develop and implement a spill prevention and control program.

- Noise: The project proponent will employ noise-reduction design features in the design of the proposed project. Implement equipment noise reduction measures and move portable equipment as far from noise-sensitive locations, as feasible.

- Transportation and Traffic: The project proponent will prepare and implement a traffic management plan that would identify the location of temporary detours and signage to facilitate local traffic patterns and through-traffic requirements. Emergency service providers would be contacted with adequate advanced notice of street closures and detours. Businesses would be contacted and advised concerning construction activities.

Based on its independent review of the DEIR, FEIR, and the City of Stockton Resolution 07/02-62, the Board finds that for each of the significant impacts described above, changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the FEIR. Moreover, such changes or alterations are within the responsibility and jurisdiction of another public agency, the City of Stockton, and such changes have been adopted by that agency.

The documents and other materials which constitute the record of the Central Valley Flood Board's proceedings in this matter are in the custody of Jay Punia, Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Rm. 151, Sacramento, California 95821.

HEC-RAS Plan: 100YR HIGH River: French Camp Slou Reach: 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	6126.98	100YR	3970.00	-5.05	13.24		13.42	0.000142	3.47	1376.58	163.74	0.16
1	6126.98	500YR	6905.00	-5.05	19.82		20.00	0.000101	3.70	2453.88	163.74	0.14
1	6026.98	100YR	3970.00	-5.15	13.23		13.40	0.000139	3.44	1391.00	163.74	0.15
1	6026.98	500YR	6905.00	-5.15	19.81		19.99	0.000099	3.68	2468.86	163.74	0.14
1	5877.13	100YR	3970.00	-4.04	13.23		13.38	0.000118	3.23	1667.76	247.31	0.15
1	5877.13	500YR	6905.00	-4.04	19.85		19.96	0.000065	3.09	3455.82	271.77	0.12
1	5726.48	100YR	3970.00	-3.88	13.14		13.34	0.000351	3.70	1250.91	239.06	0.19
1	5726.48	500YR	6905.00	-3.88	19.82		19.94	0.000139	3.16	2848.12	239.06	0.13
1	5682.02	100YR	3970.00	-3.82	13.11		13.33	0.000273	3.81	1263.71	212.30	0.19
1	5682.02	500YR	6905.00	-3.82	19.79		19.94	0.000125	3.42	2728.67	219.58	0.14
1	5650.97	100YR	3970.00	-3.78	13.10		13.32	0.000269	3.79	1198.77	200.51	0.19
1	5650.97	500YR	6905.00	-3.78	19.78		19.93	0.000125	3.42	2567.32	205.00	0.14
1	5570.9	100YR	3970.00	-4.51	13.08		13.29	0.000431	3.70	1112.37	142.64	0.20
1	5570.9	500YR	6905.00	-4.51	19.72		19.91	0.000214	3.64	2114.94	151.18	0.16
1	5544	100YR	3970.00	-5.25	13.09		13.28	0.000184	3.57	1271.96	148.09	0.17
1	5544	500YR	6905.00	-5.25	19.74		19.90	0.000102	3.49	2648.52	213.48	0.14
1	5444	100YR	3970.00	-5.25	13.07		13.26	0.000189	3.57	1269.22	147.95	0.17
1	5444	500YR	6905.00	-5.25	19.73		19.89	0.000104	3.48	2648.33	213.48	0.14
1	4544	100YR	3970.00	-2.25	12.87		13.08	0.000200	3.70	1072.61	88.49	0.19
1	4544	500YR	6905.00	-2.25	19.57		19.78	0.000128	3.80	2212.13	213.48	0.16
1	2544	100YR	3970.00	-2.25	12.48		12.69	0.000188	3.70	1071.66	88.27	0.19
1	2544	500YR	6905.00	-2.25	19.32		19.53	0.000123	3.82	2191.48	213.48	0.16
1	0	100YR	3970.00	-2.25	12.00	3.10	12.22	0.000186	3.74	1062.86	87.93	0.19
1	0	500YR	6905.00	-2.25	19.00	5.10	19.21	0.000123	3.83	2157.58	213.48	0.16

HEC-RAS Plan: Prop 100YR River: French Camp Slou Reach: 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	6126.98	100YR	3970.00	-5.05	13.21		13.39	0.000144	3.48	1371.42	163.74	0.16
1	6126.98	500YR	6905.00	-5.05	19.82		20.00	0.000101	3.70	2454.14	163.74	0.14
1	6026.98	100YR	3970.00	-5.15	13.20		13.37	0.000140	3.45	1385.81	163.74	0.15
1	6026.98	500YR	6905.00	-5.15	19.81		19.99	0.000099	3.68	2469.13	163.74	0.14
1	5877.13	100YR	3970.00	-4.04	13.20		13.34	0.000118	3.24	1663.99	245.52	0.15
1	5877.13	500YR	6905.00	-4.04	19.85		19.96	0.000064	3.08	3460.33	271.77	0.12
1	5726.48	100YR	3970.00	-3.88	13.11	3.77	13.32	0.000167	3.73	1157.43	138.96	0.19
1	5726.48	500YR	6905.00	-3.88	19.75	6.64	19.94	0.000090	3.71	2151.12	160.44	0.15
1	5683		Bridge									
1	5570.9	100YR	3970.00	-4.51	13.08		13.29	0.000203	3.69	1114.75	145.61	0.20
1	5570.9	500YR	6905.00	-4.51	19.73		19.91	0.000098	3.58	2138.20	154.18	0.15
1	5544	100YR	3970.00	-5.25	13.09		13.28	0.000184	3.57	1272.30	155.95	0.17
1	5544	500YR	6905.00	-5.25	19.75		19.90	0.000100	3.45	2676.05	213.48	0.14
1	5444	100YR	3970.00	-5.25	13.07		13.26	0.000189	3.57	1269.42	154.03	0.17
1	5444	500YR	6905.00	-5.25	19.74		19.89	0.000102	3.45	2674.07	213.48	0.14
1	4544	100YR	3970.00	-2.25	12.87		13.08	0.000200	3.70	1072.61	88.49	0.19
1	4544	500YR	6905.00	-2.25	19.57		19.78	0.000128	3.80	2212.13	213.48	0.16
1	2544	100YR	3970.00	-2.25	12.48		12.69	0.000188	3.70	1071.66	88.27	0.19
1	2544	500YR	6905.00	-2.25	19.32		19.53	0.000123	3.82	2191.48	213.48	0.16
1	0	100YR	3970.00	-2.25	12.00	3.10	12.22	0.000186	3.74	1062.86	87.93	0.19
1	0	500YR	6905.00	-2.25	19.00	5.10	19.21	0.000123	3.83	2157.58	213.48	0.16